

ABSTRACT

A flexible scheduling method with tunable throughput maximization and fairness guarantees in resource allocation is required and suitable for high-rate packet data and other services. Our inventive method, named *Alpha-Rule*, employs a control variable α , that permits dynamic and/or real-time adjustment/tradeoff between aggregate throughput, per-user throughput, and per-user resource allocation. Our method advantageously operates in conjunction with Multiple-Input Multiple-Output techniques such as Space-Time Block Coding (STBC), Bell Labs Layered Space-Time (BLAST) and others, while offering greater flexibility than existing scheduling techniques, e.g., max-C/I or Proportionally Fair (PF).